

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) An apparatus comprising:

a first circuit configured to generate a first select signal, a second select signal and a first data stream in response to an input data stream and an exception signal; and

5 a second circuit configured to generate an output data stream in response to said first data stream, said first select signal and said second select signal, wherein said second circuit is configured to replace one or more characters of said first data stream with a predetermined invalid transmission character in  
10 response to said first select signal, wherein said second circuit comprises a first multiplexer configured to (i) multiplex said first data stream and an error injection path in response to said first select signal to present said output data stream and (ii) generate said output data stream in response to a first and a  
15 second disparity signal.

2. (ORIGINAL) The apparatus according to claim 1,  
1 wherein said exception signal comprises a transmitter exception signal.

3. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said second circuit is configured to replace said one or more characters with ~~a~~ said predetermined invalid transmission

character to indicate the presence (i) an exception condition is present and (ii) a duration of an said exception condition in a transmission station.

4. (CURRENTLY AMENDED) The apparatus according to claim 3, wherein said predetermined invalid transmission character indicates an exception condition selected from the group consisting of a hardware fault, a synchronization failure, and a software generated interrupt of a transmission function.

5. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said second circuit is further configured to present said predetermined invalid transmission character as either (i) a positive disparity character or (ii) a negative disparity character, in response to said first and said second select signals.

6. (ORIGINAL) The apparatus according to claim 5, wherein said second circuit selects and/or transmits (i) said positive disparity character when a current running disparity is negative and (ii) said negative disparity character when the current running disparity is positive.

7. (ORIGINAL) The apparatus according to claim 1, wherein said first circuit comprises a detection-encoder circuit and said second circuit comprises an error injection circuit.

8. (PREVIOUSLY PRESENTED) The apparatus according to  
claim 22, wherein said second circuit comprises a first multiplexer  
configured to multiplex said first data stream and an error  
injection path in response to said first select signal to present  
5 said output data stream.

9. (ORIGINAL) The apparatus according to claim 8,  
wherein said second circuit is further configured to generate said  
output data stream in response to a first and a second disparity  
signal.

10. (ORIGINAL) The apparatus according to claim 9,  
wherein said second circuit further comprises a second multiplexer  
configured to multiplex said first and second disparity signals in  
response to said second select signal and present said error  
5 injection path.

11. (ORIGINAL) The apparatus according to claim 10,  
wherein said output of said second multiplexer comprises an invalid  
data stream and said first data stream comprises a valid data  
stream.

12. (ORIGINAL) The apparatus according to claim 4,  
wherein said first circuit comprises (i) a detection circuit  
configured to present said first select signal in response to said  
exception condition, (ii) a tracking circuit configured to present

5       said second select signal in response to said first select signal and a code signal and (iii) an encoder circuit configured to present said first data stream and said code signal in response to said second select signal and said input data stream.

13. (ORIGINAL) The apparatus according to claim 12, wherein said detection circuit is further configured to indicate a duration of said exception condition.

14. (CURRENTLY AMENDED) An apparatus comprising:  
means for generating a first select signal, a second select signal and a first data stream in response to an input data stream and an exception signal;

5       means for generating an output data stream in response to said first data stream, said first select signal and said second select signal; and

10       means for replacing one or more characters of said first data stream with a predetermined invalid transmission character, wherein said means for generating an output data stream comprises a first multiplexer configured to (i) multiplex said first data stream and an error injection path in response to said first select signal to present said output data stream and (ii) generate said output data stream in response to a first and a second disparity signal.

15. (PREVIOUSLY PRESENTED) A method for propagating transmitter exceptions comprising the steps of:

- (A) detecting a transmitter exception; and
- (B) replacing one or more characters of a data stream with a predetermined character, wherein said predetermined character is orthogonal to an encoded data and special character set.

16. (CANCELED)

17. (ORIGINAL) The method according to claim 15, further comprising the step of:

- (C) presenting said predetermined character with either a positive or a negative disparity.

18. (ORIGINAL) The method according to claim 17, wherein step (C) further comprises selecting and transmitting (i) said positive disparity form when a current running disparity is negative or (ii) said negative disparity form when said current running disparity is positive.

19. (ORIGINAL) The method according to claim 15, wherein step (A) further comprises detecting a hardware fault, a synchronization failure, or a software generated interrupt of a transmitter function.

20. (ORIGINAL) The method according to claim 15, wherein step (B) is repeated for a duration of said transmitter exception.

21. (CURRENTLY AMENDED) A method for propagating transmitter exceptions comprising the steps of:

- (A) detecting a transmitter exception;
- (B) replacing one or more characters of a data stream with a predetermined invalid transmission character; and
- (C) presenting said predetermined invalid transmission character with either a positive or a negative disparity.

22. (CURRENTLY AMENDED) An apparatus comprising:

a first circuit configured to generate a first select signal, a second select signal and a first data stream in response to an input data stream and an exception signal; and

5 a second circuit configured to generate an output data stream in response to said first data stream, said first select signal and said second select signal, wherein said second circuit is configured to (i) replace one or more characters of said first data stream with a predetermined invalid transmission character to 10 indicate the presence and duration of an exception condition in a transmission station and (ii) present said predetermined invalid transmission character as either (a) a positive disparity character or (b) a negative disparity character, in response to said first and second select signals.